

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/247,874ADATE: 09/01/1999
TIME: 16:35:09

Input Set: I247874A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: Duff, Gordon W.
2 di Giovine, Francesco Saverio
3 <120> TITLE OF INVENTION: THERAPEUTIC AND DIAGNOSTIC BASED ON A NOVEL IL-1B
4 MUTATION
5 <130> FILE REFERENCE: MSA-004.01
6 <140> CURRENT APPLICATION NUMBER: US/09/247,874A
7 <141> CURRENT FILING DATE: 1999-02-10
8 <160> NUMBER OF SEQ ID NOS: 18
9 <170> SOFTWARE: PatentIn Ver. 2.0
10 <210> SEQ ID NO 1
11 <211> LENGTH: 9721
12 <212> TYPE: DNA
13 <213> ORGANISM: Homo sapiens
14 <220> FEATURE:
15 <223> OTHER INFORMATION: IL-1beta
16 <220> FEATURE:
17 <223> OTHER INFORMATION: "n" at various positions throughout the sequence
18 represent a, t, c, g or unknown
19 <400> SEQUENCE: 1
20 agaaaagaaag agagagagaa agaaaagaaa gaggaaggaa ggaaggaagg aagaaagaca 60
21 ggctctgagg aaggtggcag ttcctacaac gggagaacca gtggtaatt tgcaaagtgg 120
22 atcctgtgga ggcannncaga ggagtccctt aggccaccca gacagggtt ttagctatct 180
23 gcaggccaga caccaaattt caggagggtt cagtgttagg aatggattat ggcttatcaa 240
24 attcacagga aactaacatg ttgaacagct tttagatttc ctgtggaaaa tataacttac 300
25 taaagatgga gttcttgtga ctgactcctg atatcaagat actgggagcc aaattaaaaa 360
26 tcagaaggct gcttggagag caagtccatg aaatgctttt tttcccacag tagaacctat 420
27 ttccctcggt tctcaaatac ttgcacagag gctcaactccc ttggataatg cagagcgagc 480
28 acgataacctg gcacatacta atttgaataa aatgctgtca aattcccatt cacccattca 540
29 agcagcaaac tctatctcac ctgaatgtac atgccaggca ctgtgctaga cttggctcaa 600
30 aaagattca gttcctgga ggaaccagga gggcaagggt tcaactcatg gctataagaa 660
31 gtgttacagg ctggacacgg tggctcacgc ctgtaatccc aacatttggg agggcgaggc 720
32 gggcagatca caaggtcagg agatcgagac catcctggct aacatggta aaccctgtct 780
33 ctactaaaaa tacaaaaaaat tagccggcgt ttggcggcag gtgcctgtag tcccagctgc 840
34 tggggaggct gaggcaggag aatggtgtga acccgggagg cggaacttgc agggggccga 900
35 gatcggtcca ctgcactcca gcctggcga cagagtgaga ctctgtctca aaaaaaaaaa 960
36 aaaagtgtta ttagtcagac ctgtcaaaga ggcaaaaggag ggtgttctca cactccaggc 1020
37 actgttccata acctggactc tcattcattc tacaaaatgga gggctccctt gggcagatcc 1080
38 ctggagcagg cactttgtgtt gttgtctcggt taaagagaaa ctgataactc ttggattac 1140
39 caagagatag agtctcagat ggtatattttt acagaaaacaa tattccact tttcagagtt 1200
40 caccaaaaaa tcattttagg cagagctcat ctggcattga tctggttcat ccatgagatt 1260
41 ggcttagggta acagcacctg gtcttgagg gttgtgttag cttatctcca gggttcccc 1320
42 aactccgtca ggagcctgaa ccctgcatac cgtatgttct ctgccccagc caagaaaggt 1380
43 caattttctc ctcagaggct cctgcaattt acagagagct cccgaggcag agaacagcac 1440
44 ccaaggtaga gaccacaccc ctcaatacag acagggaggg ctattggccc ttcattgtac 1500

ENTERED

PAGE : 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/247,874A

DATE: 09/01/1999
TIME: 16:35:09

Input Set: I247874A.RAW

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/247,874ADATE: 09/01/1999
TIME: 16:35:09

Input Set: I247874A.RAW

95 gcatgtacaa aaagatgaca agtagaatcg ggatttattc taaagaatag cctgttaagg 4560
96 gtccagaagc cacattctag tcttgagtct gcctctaccc gctgtgtgcc cttgagtaca 4620
97 cccttaacct ccttgagctt cagagggga taatctttt attttatttt attttatttt 4680
98 gtttgtttt gtttgggtt gtttatgag acagagtctc actctgttgc ccaggctgga 4740
99 gtgcagtggt acaatcttgg cttaactgcat cctccacccct ctgagttcaa gcgattctcc 4800
100 ttccctcagtc tcctgaatag cttaggattac aggtgcaccc caccacaccc agctaatttt 4860
101 tgtatttta gtagagaagg ggttgcaca tggtggccag gctgggtttt aagtccctgac 4920
102 ctaaatgatt catccaccc tcgtttccaa agtgctgggaa ttacaggcat gagccaccac 4980
103 gcctggccca gagagggatg atcttttagaa gctcgggatt cttaaagcc ctttcctct 5040
104 ctctgagctt tctactctct gatgtcaaag catggttccct ggcaggacca cctcaccagg 5100
105 ctccctccct cgctctctcc gcagtgcctcc ttccaggacc tggacctctg ccctctggat 5160
106 ggcggcatcc agctacgaat ctccgaccac cactacagca agggottcag gcaggcccg 5220
107 tcagttgtt ggtccatggca caagctgagg aagatgctgg ttccctgccc acagaccttc 5280
108 caggagaatg acctgagcac cttttttccc ttcatctttt aagaaggtag ttagccaaga 5340
109 gcagggcagta gatctccact tggcacttct tggaaagtcat caagccccag ccaactcaat 5400
110 tccccccagag ccaaagccct ttaaaggtag aaggcccagc ggggagacaa aacaaagaag 5460
111 gctggaaacc aaagcaatca tctcttagt ggaaactattt cttaaagaag atcttgatgg 5520
112 ctactgacat ttgcaactcc ctcactctt ctcaggggcc tttcaattac attgtcacca 5580
113 gaggttcgta acctccctgt gggctagtgt tatgaccatc accatttac ctaagtagct 5640
114 ctgttgcctg gccacagtga gcagtaatag acctgaagct ggaacccatg tctaatagtg 5700
115 tcaggtccag tggcttagc caccctactc ccagcttcat ccctactgg tttgtcatca 5760
116 gactttgacc gtatatgctc aggtgtcctc caagaaatca aattttgcca cctgcctca 5820
117 cgaggcctgc cttctgtatt ttatacctaa acaacatgtg ctccacattt cagaacccat 5880
118 cttcttcgac acatgggata acgaggctt tggcactgat gcacccgtac gatcaactgaa 5940
119 ctgcacgctc cgggactcac agcaaaaaag ctgggtgatg tctggccat atgaactgaa 6000
120 agctctccac ctccaggggac aggatatggaa gcaacaaggaa aatggaaac atcctggttt 6060
121 ccctgcctgg cttctggca gcttgcataat tctccatgtt ttaaacaaggaa tagaaaggta 6120
122 attaaggca aatgatcaac acaagtgaaa aaaaatatta aaaaggaata tacaaacttt 6180
123 ggtcctagaa atggcacatt tgattgcact ggccagtgc tttgttaaca ggagtgtgac 6240
124 cctgagaaat tagacggctc aagcactccc aggaccatgt ccacccaaat ctcttggca 6300
125 tagtgcagtg tcaattcttc cacaatatgg ggtcatttgc tggacatggc ctaactgcct 6360
126 gtgggttctc tcttcctgtt gttgaggctg aaacaaggat gctggagcga taatgtgtcc 6420
127 atccccctcc ccagtcttcc ccccttgcctt caacatccgt cccacccaaat gccagggttgt 6480
128 tccttgcattt gaaattttac cggccacggc gaacttataat ctctccgtg taacgggca 6540
129 aagttcaag tgcggtaac ccatcattag ctgtggtgat ctgcctggca tgcgtgccaca 6600
130 gtagccaaag cctctgcaca ggagtgtggg caactaaggc tgctgactttt gaaggacacg 6660
131 ctcactcagg gggaaagctat ttgctctcag ccaggccaaag aaaaatctgt ttctttggaa 6720
132 tcgggttagta agagtgtatcc cagggcctcc aattgacact gctgtgactg aggaagatca 6780
133 aaatgagtgt ctctcttgg agccacttcc ccagctcagc ctctctctc ccagtttctt 6840
134 cccatgggct actctctgtt cctgaaacag ttctggtgcc tgatttctgg cagaaggatca 6900
135 gcttcaccc tcgtttcc ttccacatttgc atcaaggatgt tccgcctctg tggatggca 6960
136 cattgccacgc cagtacacaa atggcttctt ctcttccttc ctccagcatt taaaatgttag 7020
137 accctcttcc attctccgtt cctactgcta tgaggctctg agaaaccctc aggccttgc 7080
138 ggggaaaccc taaatcaaca aatgaccctt gctattgtct tgagaaatgc aagttatctt 7140
139 gtgtctttagg ccaagggacc tcactgtggg ttcccacaga ggctaccaat tacatgtatc 7200
140 ctactctcgg ggctagggtt tggggtgacc ctgcattgtc tgcccttaac cacaagaccc 7260
141 cttctttctc tcagttgggtt tctccatgtc ctgttgcataa ggagaagaaa gtaatgacaa 7320
142 aatacctgtg gccttggcc tcaaggaaaa gaatctgtac ctgtccctgc tggtgaaaga 7380
143 tgataagccc actctacagc tggaggtaag tgaatgctat ggaatgacgc cttctcagc 7440
144 ctccctgctac cacttattcc cagacaattc accttctccc cgcggccatc ccttaggaaaa 7500

PAGE : 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/247,874A

DATE: 09/01/1999
TIME: 16:35:09

Input Set: I247874A.RAW

145 gctgggaaca ggtctattt acaagtttg cattaatgt aataaaat tt acataat tt 7560
146 taactgcgtg caaccccaa tcctgctgca gaaaattaaa tcattttgcc gatgttatta 7620
147 tgccttacca tagtacaac cccaaacagat tatatatgt tagggctgct ctcatttgat 7680
148 agacacccctg gggaaatagat gacttaaagg gtcccattat cacgtccact ccactccaa 7740
149 aatcaccacc actatcacct ccagcttct cagaaaaago ttcatttcca agttgatgtc 7800
150 attctaggac cataaggaaa aatacaataa aaagccccctg gaaacttaggt acttcaagaa 7860
151 gctctagctt aattttcacc ccccaaaaaa aaaaaaattt tcacctacat tatgctcctc 7920
152 agcatttggc actaagttt agaaaagaag aagggtctt ttaataatca cacagaaaagt 7980
153 tgggggccc a gttacaactc aggagtctgg ctctgtatca tgtgacctgc tcgtcagtt 8040
154 ccttctggc caacccaaag aacatcttc ccataggcat ctttgcctt tgccccacaa 8100
155 aaattcttct ttctcttctg ctgcagagt tagatccaa aaattacca aagaagaaga 8160
156 tggaaaagcg atttgtctt aacaagatag aaatcaataa caagctggaa ttgagtctg 8220
157 cccagttccc caactggta atcagcacct ctcaaggcaga aaacatgccc gtcttcctgg 8280
158 gagggacc aaggcccgag gatataactg acttcaccat gcaatttgc tttccctaaa 8340
159 gagagctgta cccagagagt cctgtgtga atgtggactc aatccotagg gctggcagaa 8400
160 agggAACAGA aagggtttt agtacggcta tagcctggac tttcctgtt tctacaccaa 8460
161 tgcccaactg cctgccttag ggtagtgtta agaggatctc ctgtccatca gccaggacag 8520
162 tcagctctt ccttcaggg ccaatccccca gcccctttgt tgagccaggc ctcttcacc 8580
163 tctcctactc acttaaagcc cgccgtacag aaaccacggc cacatttggc tctaagaaac 8640
164 cctctgtcat tcgctccac attctgtatca gcaaccgctt ccctatttat ttatttattt 8700
165 gtttgttgc ttgtattcat ttgtctaatt tattcaaagg gggcaagaag tagcagtgtc 8760
166 tgtaaaagag cctagtttt aatagctatg gaatcaattc aatttggact ggtgtgtct 8820
167 ctttaaatca agtcctttaa ttaagactga aaatataaa gctcagatta tttaaatggg 8880
168 aatatttata aatgagcaaa tatcataactg ttcaatgggtt ctgaaataaa cttcaactgaa 8940
169 gaaaaaaaaa aaagggtctc tcctgatcat tgactgtctg gattgacact gacagtaagc 9000
170 aaacaggctg tgagagttt tgggactaag cccactcctc attgctgatg gotgcaagta 9060
171 cctagaaata tcctggcca ccgaagacta tcctcctcac ccatccctt tattcgttg 9120
172 ttcaacagaa ggatattcag tgcacatctg gaacaggatc agctgaagca ctgcaggag 9180
173 tcaggactgg tagtaacagc taccatgatt tatctatcaa tgcacccaaac atctgtttag 9240
174 caagcgctat gtacttaggg ctgggagttc agagatgaga acagtccacaa gtccttcctc 9300
175 agataggaga ggcagctgt tataagcaga acaaggttaac atgacaagta gagtaagata 9360
176 gaagaacgaa gaggagtagc caggaaggag ggaggagaac gacataagaa tcaagcctaa 9420
177 agggataaac agaagattt cacacatggg ctgggcaat tgggtgtcgg ttacgcctgt 9480
178 aatcccagca ctgggggtgg cagggcaga aagatcgctt gagcccagga gttcaagacc 9540
179 agcctggca acatagttag actcccatct ctacaaaaaa taaataata aataaaacaa 9600
180 tcagccaggc atgctggcat gcacctgttag tcctagctac ttgggaagct gacactggag 9660
181 gattgcttgc gcccagaagt tcaagactgc agtgagctt tccgttgc acc tgcaggcga 9720
182 c 9721
183 <210> SEQ ID NO 2
184 <211> LENGTH: 9721
185 <212> TYPE: DNA
186 <213> ORGANISM: Homo sapiens
187 <220> FEATURE:
188 <223> OTHER INFORMATION: IL-1Beta allele 2
189 <220> FEATURE:
190 <223> OTHER INFORMATION: "n" at various positions throughout the sequence
191 represent a, t, c, g or unknown
192 <400> SEQUENCE: 2
193 agaaaagaag agagagagaa agaaaagaaa gaggagggaa ggaagggagg aagaaaagaca 60
194 ggctctgagg aaggtggcag ttcctacaac gggagaacca gtggtaatt tgcaaagtgg 120

PAGE : 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/247,874ADATE: 09/01/1999
TIME: 16:35:09

Input Set: I247874A.RAW

w--bx 195 atcctgtgga ggccanncaga ggagtcctt aggccaccca gacaggggctt ttagctatct 180
 196 gcaggccaga caccAAattt caggaggggct cagtgttagg aatggattat ggcttatcaa 240
 197 attcacagga aactaacatg ttgaacagct tttagatttc ctgtggaaaa tataacttac 300
 198 taaagatgga gttcttgtga ctgactcctg atatcaagat actgggagcc aaattaaaaa 360
 199 tcagaaggct gcttggagag caagtccatg aaatgcttt tttcccacag tagaacctat 420
 200 ttccctcgta tctcaaatac ttgcacagag gctcactccc ttggataatg cagagcgagc 480
 201 acgataacctg gcacatacta atttgaataa aatgctgtca aattcccatt cacccattca 540
 202 agcagcaaac tctatctcac ctgaatgtac atgccaggca ctgtgctaga cttggctcaa 600
 203 aaagatttca gtttcctgga ggaaccagga gggcaagggt tcaactcagt gctataagaa 660
 204 gtgttacagg ctggacacgg tggctcacgc ctgttaatccc aacatttggg aggccgaggc 720
 205 gggcagatca caaggtcagg agatcgagac catcctggct aacatggta aaccctgtct 780
 206 ctactaaaaa tacaaaaaaat tagccggcg ttggcggcag gtgcctgttag tcccagctgc 840
 207 tggggaggct gaggcaggag aatgggtgtga acccgggagg cggaacttgc agggggccga 900
 208 gatctgtcca ctgcactcca gcctggcga cagagtgaga ctctgtctca aaaaaaaaaa 960
 209 aaaagtgtta tgatgcagac ctgtcaaaga ggcaaaaggag ggtgttccta cactccaggc 1020
 210 actgttcata acctggactc tcattcattc tacaaaatggg gggctcccct gggcagatcc 1080
 211 ctggagcagg cactttgtc gtgtctcggt taaagagaaa ctgataactc ttggatttac 1140
 212 caagagatag agtctcagat ggatattctt acagaaacaa tattccact tttcagagg 1200
 213 caccaaaaaa tcattttagg cagagctcat ctggcattga tctggttcat ccatgagatt 1260
 214 ggcttagggta acagcacctg gtcttgagg gttgtgttag cttatctcca gggttgcccc 1320
 215 aactccgtca ggagcctgaa ccctgcatac cgtatgttct ctgccccagc caagaaagg 1380
 216 caattttctc ctcagaggct cctgcaattt acagagagct cccgaggcag agaacagcac 1440
 217 ccaaggtaga gaccacaccc ctcaatacag acagggaggg ctattggccc ttcattgtac 1500
 218 ccatttatcc atctgttaatg gggagattc ctaaacttaa gtacaaaagaa gtgaatgaag 1560
 219 aaaagtatgt gcatgtataa atctgtgtt cttccactt gttccacata tactaaattt 1620
 220 aaacattctt ctaacgtggg aaaatccagt attttaatgt ggacatcaac tgcacaacga 1680
 221 ttgtcaggaa aacaatgtat atttgcattt tgatacattt gcaaaatgtg tcatagttt 1740
 222 ctactccctt cccttccatg aaccagagaa ttatctcagt ttattagtcc cttcccttaa 1800
 223 gaagcttcca ccaatactct tttcccttt cctttaactt gattgtggaa tcaggtattc 1860
 224 aacagagaaa tttctcagcc tcctacttct gctttgaaa gctataaaaaa cagcgaggga 1920
 225 gaaactggca gataccaaac ctcttcgagg cacaaggcac aacaggctgc tctggattc 1980
 226 tcttcagcca atcttcattt ctcaagatgt actttaatct tccttacaac taggtgtctaa 2040
 227 gggagtctct ctgtctctt gcctctttgt gtgtatgtcat attctctctc tctctctctt 2100
 228 tcttcctctg tcttcctctc ctttcctctc tgcctctctc ctcagtttt tgcaaaaatg 2160
 229 ccaggtgtaa tataatgttt atgactcgaa aaatattctg ggaatggata ctgcttatct 2220
 230 aacagctgac accctaaagg ttatgttcaa agcctctgtc ccagctctcc tagccaatac 2280
 231 attgctagtt ggggtttggg ttatgttcaa gatgttctt gacccaaagg acttctcttt 2340
 232 cacacattca ttcattttact cagagatcat ttctttgtcat gactgccatg cactggatgc 2400
 233 tgagagaaaat cacacatgaa cgtagccgtc atggggaaatg cactcatttt cttccctttt 2460
 234 cacaggtgtc tgaagcagcc atggcagaag tacctgtgatc cgccagtggaa atgatggctt 2520
 235 attacaggtc agtggagacg ctgagaccag taacatgagc agtctccctc tttcaagagt 2580
 236 agagtgttat ctgtgtttgg agaccagatt ttcccttaa attgcctctt tcagtgccaa 2640
 237 acagggtgcc aagtaaatct gattnaaaga ctacttccoc attacaagtc cttccagcct 2700
 238 tgggacctgg aggctatcca gatgtgttgc tgcaaggggt tcctgcagag gcaaatgggg 2760
 239 agaaaaagatt ccaagccac aatacaagga atcccttgc aaagtgtggc ttggaggag 2820
 240 agggagagct cagattttag ctgactctgc tgggttagag gttaggcctc aagatccaa 2880
 241 agggagcacc agggtgcacc cctgccaggc ctgttttttgc tttctgtgc tttctgtgc 2940
 242 atatcactgt gaaacttgcc aggtgtttca ggcagctttt agaggcaggc tttttgcagt 3000
 243 ttcttattgaa cagtcaagtc ttgtacacag ggaaggaaaa ataaacctgt ttgtttttttt 3060
 244 taatttgagac atgtccctgt ttttattaca gtggcaatga ggtgtacttgc ttctttttttt 3120

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/247,874A

DATE: 09/01/1999

TIME: 16:35:09

Input Set: I247874A.RAW

Line ? Error/Warning

Original Text

22 W "N" or "Xaa" used: Feature required
195 W "N" or "Xaa" used: Feature required
447 W "N" or "Xaa" used: Feature required

atcctgtgga ggcanncaga ggagtcccct aggccacc
atcctgtgga ggcanncaga ggagtcccct aggccacc
ccgactcgag nnnnnnatgt gg